

REMARKS/ARGUMENTS

1. Rejection of claims 1-3, 6-8, 10-14, 16-18 and 20-21 under 35 U.S.C. 103(a) as being unpatentable over Ledger et al. (5,515,167) in view of Strasbaugh et al. (US 2003/0134578):

5

Claim 1:

Claim 1 is listed hereinafter for reference:

Claim 1 (previously presented) A wafer carrier for carrying a wafer, comprising:

a transparent base;

10

a conducting layer positioned on a bottom surface of the transparent base; and

a bonding layer positioned on a top surface of the wafer carrier for bonding the wafer and the transparent base together;

wherein the wafer carrier is attracted by an electrostatic chuck via the conducting layer.

15

The wafer carrier of claim 1 comprises a transparent base, a conducting layer positioned on a bottom surface of the transparent base, and a bonding layer positioned on a top surface of the wafer carrier for bonding the wafer and the transparent base together.

20

Regarding US 5,515,167, Ledger et al. teaches an electrostatic chuck including an transparent chuck 24 having a membrane 34 disposed on the transparent chuck 24 and a conducting film 32 disposed on the membrane 34. According to Ledger teaching (Fig.3), a voltage difference exists between the wafer 14 and the conducting fim 32, and the wafer 14 is attracted to the membrane 34 by elecstatic force. Differing from Ledger's teaching,

25

the wafer is adhered to the transparent base with a **bonding layer** in accordance with the amended claim 1 of the present application. In the Office action, the Examiner asserts that using a bonding layer is known to the art and would have been obvious to one ordinary

skilled in the art at the time the invention was made to use a bonding layer as taught by Strasbaugh to fix the wafer on the chuck for the purpose of providing a secure support. The applicant disagrees and explains as follows.

5 In Ledger's teaching, he teaches attracting the wafer to the chuck by electrostatic force. Ledger fails to teach or suggest any use of bonding layer to fix wafer on the chuck. In addition, the intended purpose of Ledger's transparent chuck is to force a wafer to take a prescribed shape, and a gap exists between the wafer 14 and the membrane 34 so that the interferometer can measure the thickness of the gap.

10

 MPEP 2143.01 (V) clearly teaches: **"If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification"**. The intended purpose of Ledger's invention is to measure the thickness of the gap between the
15 wafer and the membrane, and using a bonding layer to bond the wafer and the membrane goes against Ledger's intended purpose because there is no longer gap between the wafer and the bonding layer. As a result, there is no suggestion or motivation to make the modification as the Examiner proposed according to MPEP 2143.01 (V). Reconsideration of claim 1 is therefore requested.

20

Claim 2-3, 6-8, and 10-11:

 Claims 2-3, 6-8, and 10-11 are dependent on claim 1, and should be allowed if claim 1 is found allowable. Reconsideration of claims 2-3, 6-8, and 10-11 is therefore requested.

25

Claim 12:

 Claim 12 is listed hereinafter for reference:

 Claim 12 (previously presented) A wafer carrier adapted for use in a double-sided

process for carrying a wafer, comprising:

a transparent base;

a conducting layer positioned on a bottom surface of the transparent base, wherein
the wafer carrier is attracted by an electrostatic chuck via the conducting layer;

5 and

a bonding layer positioned on a top surface of the transparent base for bonding the
wafer and the transparent base.

10 Claim 12 also includes the limitation "a bonding layer positioned on a top surface of
the transparent base for bonding the wafer and the transparent base". Reconsideration of
claim 12 in view of the argument made to rejection of claim 1 is requested.

Claims 13-14, 16-18, and 20-21:

15 Claims 13-14, 16-18, and 20-21 are dependent on claim 12, and should be allowed if
claim 12 is found allowable. Reconsideration of claims 13-14, 16-18, and 20-21 is
therefore requested.

**2. Rejection of claims 4 and 15 under 35 U.S.C. 103(a) as being unpatentable over
Ledger et al. in view of Strasbaugh et al. and further in view of Suzuki et al. (US
20 2003/0029565):**

Claim 4:

Claim 4 is dependent on claim 1, and should be allowed if claim 1 is found allowable.
Reconsideration of claim 4 is therefore requested.

25

Claim 15:

Claim 15 is dependent on claim 12, and should be allowed if claim 12 is found
allowable. Reconsideration of claim 15 is therefore requested.

Appl. No. 10/711,882
Amdt. dated December 28, 2006
Reply to Office action of October 05, 2006

3. Rejection of claims 9 and 19 under 35 U.S.C. 103(a) as being unpatentable over Ledger et al. in view of Strasbaugh et al., and further in view of Bollen et al. (US 4,766,515):

5

Claim 9:

Claim 9 is dependent on claim 1, and should be allowed if claim 1 is found allowable. Reconsideration of claim 9 is therefore requested.

10 Claim 19:

Claim 19 is dependent on claim 12, and should be allowed if claim 12 is found allowable. Reconsideration of claim 19 is therefore requested.

15 Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,



Date: 12/28/2006

20 Winston Hsu, Patent Agent No. 41,526
P.O. BOX 506, Merrifield, VA 22116, U.S.A.
Voice Mail: 302-729-1562
Facsimile: 806-498-6673
e-mail : winstonhsu@naipo.com

25

Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)